Solar
catalogue
2023

POLYCAB

IDEAS. CONNECTED.

Grid Tie Inverter | PV Module | Solar DC Cables

Corporate Office

POLYCAB INDIA LIMITED

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Content

Introduction

Polycab is the country's largest manufacturer of wires and cables, manufacturing around 3.9 million kilometers of cables every year. Underpinning our leadership position are our solid business fundamentals, which include multi-location manufacturing with a high degree of backward integration, a comprehensive product portfolio, strong brand positioning, robust distribution network, and experienced management. Polycab's widest range of wires & cables helps the company bond with millions of satisfied customers, riding on key differentiators like product innovation, superior quality, and ready availability. Our clientele includes market leaders in sectors like utilities, power generation, transmission and distribution, petroleum and oil refineries, original equipment manufacturers, EPC contractors, steel, metal, cement, chemicals, atomic energy, railways, and nuclear power industries amongst others.

Apart from a stellar lineup of wires and cables, we have made inroads into the highly competitive FMEG market, with products like Fans, LED Lighting and Luminaires, Switches and Switchgears, Home Appliances, Solar Products and Conduits & Accessories. Polycab's corporate advantage includes its extensive base of expertise, proven technological capabilities, and comprehensive skills of its human resources.

Solar-the Infinite Source Of Power

The sun provides us with ample energy than we could ever use, and no one can monopolies the sunlight. Sun light is free and can be used to convert into electrical energy which is referred as Solar PV system. Solar electricity is green renewable energy and doesn't release any harmful carbon dioxide or other pollutants. A typical 3 kW home solar PV system could save around 3 tons of carbon per year.

With the continuously increasing demand for electric power, the significantly high price of oil and the growing concern for the environment, many businesses are in the process of implementing alternative sources of energy. Among the renewable energy sources, solar energy is a sustainable choice and that can be used in various applications. Many businesses are now extracting this alternative source of energy, hoping to benefit from its numerous advantages.

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To make an ecological awareness and safe use of renewable energy Polycab has brought complete Solar energy solution in Indian and overseas market. Polycab Solar equipment meet the high expectation that are demanded from the Solar system.

Polycab has brought the environmentally friendly E-Beam Technology that meets the demand of sustainable product in line with worldwide market trends and ecological awareness.

Polycab has a comprehensive product range in Solar PV system. The products are manufactured in latest state of the art machines and tested in well-equipped laboratories. These are highly suitable in rough climatic condition as well as guaranteed for more than 25 years of use.

We at Polycab ventured into Solar in 2012 with manufacturing of Solar DC Cables. International accreditation from TUV Rheinland was secured for our Solar DC cables subsequently, initially for 2Pfg 1169/08.2007 standard and then for EN 50618 for sizes 1.5sq. mm to 300sq.mm complying also to IEC 62930.

We have successfully supplied Solar DC as well as AC Cables to large EPC players, Distributors pan India as well as to many of our International Clients all over the Globe. Repeat orders have been forthcoming out of confidence on our product quality and supply capabilities.

Extending our foray into Solar field we added Solar On-Grid Inverters in our Product Basket in 2016. Polycab Solar Grid-Tie String Inverters have already captured the hearts of Solar Roof-Top System Integrators pan India through product performance and prompt after Sales-Services provided by Polycab. Polycab On-Grid Inverters are IEC / BIS Certified with all relevant applicable standards for the full range of Inverters. Polycab has established Solar Grid Tie Inverter manufacturing setup and have started offering MAKE IN INDIA inverters from 2 kW and 110 kW capacity, catering to Residential, Commercial & Industrial solar projects from KW to MW scale. These inverters designed with highest reliability, efficiency to make compatible with latest module technology and are IEC & BIS certified.

Our success story of On-Grid Inverters in short span of 7 years is worth mentioning. We have already supplied 800MW in capacity and 1Lac+ Inverters in quantity. All these Inverters are already installed and running successfully in the field. We are sure to capture good market share.

We have also added Solar DC MCBs and Solar PV Modules in our product basket to achieve our goal to become a one stop shop for all the major components needed in Solar Projects.

With our strong base, large network of branches, warehouses, and distributors across India, we have been extending our best sales and service support to our valued clients and end users.

With excellent performance and better generation Polycab Solar Products have been the most preferred choice amongst many EPC companies, System Integrators and End Users.

System Integrator is now nearing reality and we are now poised to offer all our products to International Markets.

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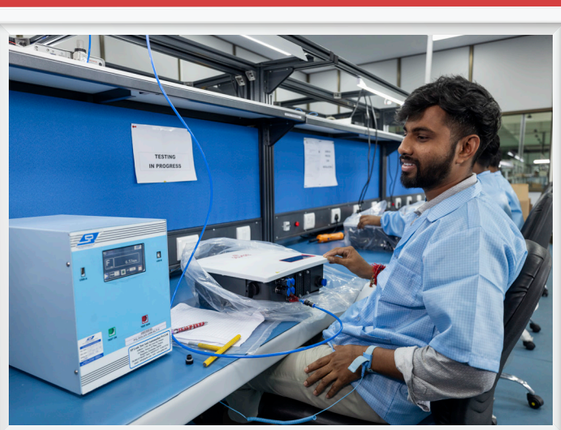
India's leading Solar Inverter Brand



MAKE IN INDIA

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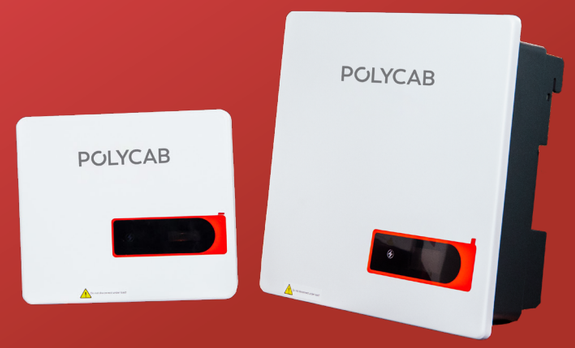
EXCLUSIVE FOR RESIDENTIAL SMALL ROOFTOP SOLAR PROJECTS



Single Phase

PSIS-2K-SM1, PSIS-3K-SM1,
PSIS-3.6K-SM1, PSIS-4K-SM2,
PSIS-5K-SM2, PSIS-6K-SM2,

Leading Features

MAKE IN INDIA | BIS | 7 YEARS WARRANTY

Superior Efficiency

Maximum efficiency 98.2%
String Current 15A, compatible with high Power modules
150% PV configuration

High Reliability

IP65 waterproof and dustproof, C5 anti corrosion
DC / AC Inbuilt surge protections.
Compatible with wide power grid voltage and high harmonic power grid environment

Intelligent Maintenance

App quick commissioning
Remote configuration and upgrade

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Single Phase

2 kw | 3 kw | 3.6 kw | 4 kw | 5 kw | 6 kw

TECHNICAL SPECIFICATIONS						
MODEL	**PSIS-2K-SM1**	**PSIS-3K-SM1**	**PSIS-3.6K-SM1**	**PSIS-4K-SM2**	**PSIS-5K-SM2**	**PSIS-6K-SM2**
RATING	2 KW	3 KW	3.6 KW	4 KW	5 KW	6 KW
INPUT (PV)						
Max. Input Voltage	500V			550V		
Max. PV configuration (STC)	150%			150%		
Rated Input Voltage	360V			360V		
Max. Input Current	15A			30A (2*15A)		
Max. Short Circuit Current	20A			40A (2*20A)		
Start Input Voltage	70V			90V		
MPPT Operating Range	50V-490V			70V-540V		
Max. Number of PV Strings	1			2 (1/1)		
No. of MPPTs	1			2		
OUTPUT (GRID)						
Rated AC Active Power	2,000W	3,000W	3,600W	4,000W	5,000W	6,000W
Max. AC Apparent Power	2,200VA	3,300VA	3,600VA	4,400VA	5,500VA	6,000VA
Max. AC Active Power (PF=1)	2,200W	3,300W	3,600W	4,400W	5,500W	6,000W
Max. AC Output Current	10A	15A	16A	20A	25A	27.3A
Rated AC Voltage	220V/230V/240V, L+N+PE					
AC Voltage Range	160V-300V (Adjustable)					
Rated Grid Frequency	50Hz/60Hz					
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)					
THDI	<3% (Rated Power)					
DC Current Injection	<0.5%In					
Power Factor	> 0.99 Rated power (Adjustable 0.8 Leading - 0.8Lagging)					
EFFICIENCY						
Max. Efficiency	97.5%	97.8%	97.8%	98.0%	98.2%	98.2%
European Efficiency	96.8%	97.3%	97.3%	97.0%	97.4%	97.4%
PROTECTION						
DC switch	Support					
Anti-islanding protection	Support					
AC overcurrent protection	Support					
AC short circuit protection	Support					
DC reverse connection	Support					
Surge Arrester	DC Type III / AC Type III					
Insulation detection	Support					
Leakage current protection	Support					
GENERAL						
Topology	Transformerless					
IP Rating	IP65					
Night Self Consumption	<1W					
Cooling	Natural cooling					
Operating Tmp. Range	-25°C - 60°C					
Relative Humidity Range	0-100%					
Max. Operating Altitude	4000m					
Noise(typical)	30dB					
Dimensions (W*H*D)	277mm*243mm*130mm			350mm*347mm*137mm		
Weight	4.96kg			8.5Kg		
HMI & COM						
Display	Wireless & APP +LCD					
Communication	WiFi / RS485 & GPRS (Optional)					
CERTIFICATION						
Grid Connection	IEC 61727					
Anti-Islanding Protection	IEC 62116					
Environmental Testing	IEC 60068-2 (1-2-14-30)					
Safety	IEC 62109-1, IEC 62109-2					
EMC	IEC 61000					
Efficiency Measurement	IEC 61683					
WARRANTY	7 Years					

Note :
①②The range of output voltage and frequency may vary depending upon different grid codes.
Specifications are subject to change without advance notice.

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SUITABLE FOR RESIDENTIAL & COMMERCIAL ROOFTOP SOLAR PROJECTS

Three phase

PSIT-5K-SM2 , PSIT-6K-SM2 , PSIT-8K-SM2 ,
PSIT-10K-SM2 , PSIT-12K-SM3 , PSIT-15K-SM3 ,
PSIT-20K-SM4 , PSIT-25K-SM4 , PSIT-30K-SM4

Leading Features

MAKE IN INDIA | BIS APPROVED | 7 YEARS WARRANTY

Superior Efficiency

Maximum efficiency 98.4%
Maximum String Current , compatible with 600W+ modules
150% PV configuration, 110% output overload

High Reliability

Die-cast aluminum case, IP66 waterproof and dustproof, C5 anti corrosion
DC / AC surge protections.
Compatible with wide power grid voltage and high harmonic power grid environment

Intelligent Maintenance

App quick commissioning
Remote configuration and upgrade
Supports export control

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IDEAS. CONNECTED.

Three phase

PSIT-5K-SM2 | PSIT-6K-SM2 | PSIT-8K-SM2 | PSIT-10K-SM2
PSIT-12K-SM3 | PSIT-15K-SM3 | PSIT-20K-SM4 | PSIT-25K-SM4 | PSIT-30K-SM4

TECHNICAL SPECIFICATIONS									
MODEL	PSIT-5K-SM2	PSIT-6K-SM2	PSIT-8K-SM2	PSIT-10K-SM2	PSIT-12K-SM3	PSIT-15K-SM3	PSIT-20K-SM4	PSIT-25K-SM4	PSIT-30K-SM4
Rating	5 KW	6 KW	8 KW	10 KW	12 KW	15 KW	20 KW	25 KW	30 KW
INPUT (PV)									
Max. Input Voltage	1100V								
Max. PV configuration	150%								
Rated Input Voltage	620V								
Max. Input Current	15A + 15A				15A + 30A		30A + 30A		40A + 30A
Max. Short Circuit Current	20A + 20A				20A + 40A		40A + 40A		50A + 37.5A
Start Input Voltage	180V								
MPPT Operating Range	160V -1000V								
Max. Number of PV Strings	2(1/1)				3(1/2)		4(2/2)		
No. of MPPTs	2								
OUTPUT (GRID)									
Rated AC Active Power	5000W	6,000W	8,000W	10,000W	12,000W	15,000W	20,000W	25,000W	30,000W
Max. AC Apparent Power	5500VA	6,600VA	8,800VA	11,200VA	13,200VA	16,700VA	22,000VA	27,500VA	33,000VA
Max. AC Active Power (PF=1)	5500W	6,600W	8,800W	11,000W	13,200W	16,700W	22,000W	27,500W	33,000W
Max. AC Output Current	3*8.4A	3*10.1A	3*13.4A	3*17A	3*20.2A	3*25.3A	3*33.7A	3*39.8A	3*50.2A
Rated AC Voltage	380V/400V/415V, 3W+N+PE								
AC Voltage Range[1]	260V- 510V (Adjustable)								
Rated Grid Frequency	50Hz/60Hz								
Grid Frequency Range[2]	45Hz-55Hz/55Hz -65Hz (Adjustable)								
THDI	<3%@Rated Power								
DC Current Injection	<0.5%@Rated Current								
Power Factor	> 0.99 Rated power (Adjustable 0.8 L D-0.8, L G)								
EFFICIENCY									
Max. Efficiency	98.2%				98.3%		98.4%		
European Efficiency	97.8%				97.8%		98.0%		
PROTECTION									
DC switch	Support								
Anti-islanding protection	Support								
AC overcurrent protection	Support								
AC short circuit protection	Support								
DC reverse connection	Support								
Surge Arrester	AC Type III / DC Type III								
Insulation detection	Support								
Leakage current protection	Support								
GENERAL									
Topology	Transformerless								
IP Rating	IP66								
Night Self Consumption	<1W								
Cooling	Natural cooling								
Operating Tmp. Range	-25°C -60°C								
Relative Humidity Range	0 - 100%								
Max. Operating Altitude	4000m								
Noise	<30dB								
Dimensions (W*H*D)	398mm*460mm*190mm								
Weight	16 Kgs				18.7 Kgs		20 Kgs		21.5 Kgs
HMI & COM									
Display	Wireless & APP+LED, LCD								
Communication	RS485, Optional : WiFi/GPRS/4G /LAN								
CERTIFICATION									
Grid Connection	IEC 61727								
Anti-Islanding Protection	IEC 62116								
Environmental Testing	IEC 60068-2 (1-2-14-30)								
Safety	IEC 62109-1, IEC 62109-2								
EMC	IEC 61000								
Efficiency Measurement	IEC 61683								
WARRANTY	7 Years								

Note :
①②The range of output voltage and frequency may vary depending upon different grid codes.
Specifications are subject to change without advance notice.

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SUITABLE FOR COMMERCIAL & INDUSTRIAL ROOFTOP SOLAR PROJECTS

Three phase

PSIT-40K-SM6
PSIT-50K-SM8
PSIT-60K-SM8

Leading Features

MAKE IN INDIA

7 YEARS WARRANTY

- Maximum Efficiency 98.2%
- Wide Voltage Range
- Supports 50% DC overload,
- 3/4 MPPT design with precise MPPT algorithm
- THDi < 3%,
- IP66 Enclosure
- Intelligent Fan Cooling
- Intelligent string monitoring
- Smart I-V Curve Diagnosis
- Fuse free design to avoid hazard
- Type II SPD for both DC and A C side
- Integrated DC disconnect switches
- RS-485,Wi-Fi / GPRS monitoring interface
- Support "Y" type connection in DC side
- Supports aluminium wire access to reduce cost
- Free remote monitoring on Web Portal and Mobile App

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Three phase 40 kw | 50 kw | 60 kw

TECHNICAL SPECIFICATIONS			
MODEL	PSIT-40K-SM6	PSIT-50K-SM8	PSIT-60K-SM8
Efficiency			
Max. Efficiency	98.2%	98.2%	98.2%
European Efficiency	97.8%	97.8%	97.8%
Input(PV)			
Max. Input Voltage	1100V		
Max. PV configuration (STC)	150%		
Rated Input Voltage	620V		
Max. Input Current	40A+2*32A	40A+3*32A	40A+3*32A
Max. Short Circuit Current	50A+2*45A	50A+3*45A	50A+3*45A
Start Input Voltage	200V		
MPPT Operating Voltage Range	180~1000V		
Max. Number of PV Strings	2/2/2	2/2/2	2/2/2
No. of MPPTs	3	4	4
Output(Grid)			
Rated AC Active Power	40000W	50000W	60000W
Max. AC Apparent Power	44500VA	55600VA	66700VA
Max. AC Active Power (PF=1)	44500W	55600W	66700W
Max. AC Output Current	67.5A	84.3A	92A
Rated AC Voltage	380/400/415V, 3L/N/PE,3L/PE		
AC Voltage Range①	322V-520V		
Rated Grid Frequency	50Hz/60Hz		
Grid Frequency Range②	45~55Hz/55~65Hz		
THDI	3%（Rated Power）		
DC Current Injection	<0.5%In		
Power Factor	0.8LD~0.8LG		
Protection			
DC switch	YES		
Anti-islanding protection	YES		
AC overcurrent protection	YES		
AC short circuit protection	YES		
DC reverse protection	YES		
Surge Arrester	DC Type II / AC Type II		
Insulation detection	YES		
Leakage current protection	YES		
General			
Topology	Transformer-less		
IP Rating	IP66		
Night Self Consumption	<1W(standard)		
Cooling	Fan cooling		
Operating Temperature Range	-25°C~60°C		
Relative Humidity Range	0~100%		
Max. Operating Altitude	4000m		
Noise(typical)	<45dB	<45dB	<55dB
Dimensions (W*H*D)	635mm*530mm*224mm		635mm*530mm*233mm
Weight	41.5kg	42kg	42 kg
HMI & COM			
Display	Wireless & APP+LED, LCD		
Communication	Wi-Fi / RS485 & GPRS (Optional)		
Certification			
Grid Connection		IEC 61727	
Anti-Islanding Protection		IEC 62116	
Environmental Testing		IEC 60068-2 (1-2-14-30)	
Safety		IEC 62109-1, IEC 62109-2	
EMC		IEC 61000	
Efficiency Measurement		IEC 61683	
Warranty	7 Years		

Note :
①②The range of output voltage and frequency may vary depending upon different grid codes.
Specifications are subject to change without advance notice.

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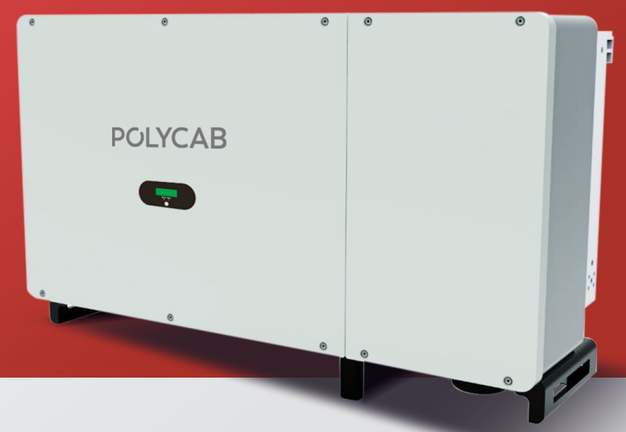

Three phase
PSIT-100K-AM10
PSIT-110K-AM10

Leading Features

7 YEARS WARRANTY

- Maximum Efficiency 98.7%
- Wide Voltage Range
- Supports 50% DC overload
- 10 MPPT design with precise MPPT algorithm
- THDi < 2%, Low Harmonic Distortion
- IP66 for outdoor Installation
- Intelligent Fan Cooling
- Intelligent string monitoring
- Smart I-V Curve Diagnosis
- Fuse free design to avoid hazard
- Type II SPD for both DC and A C side
- Integrated DC disconnect switches
- RS-485, Wi-Fi / GPRS monitoring interface
- Support "Y" type connection in DC side
- Support aluminium wire access to reduce cost
- Free remote monitoring on Web Portal and Mobile App

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Three phase PSIT -100K - AM10 | PSIT -110K - AM10

TECHNICAL SPECIFICATIONS		
MODEL	**PSIT-100K-AM10**	**PSIT-110K-AM10**
Rating	100 KW	110 KW
INPUT (PV)		
Max. DC Input Voltage	1100 V	
Max. DC Input Current	30A *10	30A *10
MPPT Voltage Range	200 - 1000 V	
Recommended MPPT Operating Range	600 V	
No. of MPPT	10	10
Max. no. of Strings per MPPT	2	
OUTPUT (GRID)		
Rated Output Power	100 KW	110 KW
Max. Output Power	110 KVA	121 KVA
Max. Output Current	158.8A	174. 6A
Rated grid Voltage	400V	
Grid Voltage range	310 ~ 480Vac	
Rated Grid Frequency	50Hz / 60Hz	
Grid Frequency Range[2]	45-55Hz / 55- 65Hz	
THD	<2% (Under the rated power)	
Power Factor	<0.99 (rated power) / 0.8 leading ~ 0.8 lagging	
DC Current Injection	<0.5% (Under the rated power)	
SYSTEM DATA		
Max. Efficiency	98.7%	98.7%
Euro. Efficiency	98.1%	98.1%
Humidity range	0-100% non-condensing	
Cooling type	Intelligent forced air cooling	
Temperature range	-25 ~ +60°C	
Power consumption at night	<1W	
Max. working altitude	4000m	
Display	LED / LCD	
Communication interface	RS485 / Wifi / GPRS (optional)	
PROTECTION		
DC reverse -polarity protection	Support	
Short circuit protection	Support	
Output over current protection	Support	
Output over voltage protection	Support	
Insulation resistance monitoning	Support	
Residual current detection	Support	
Surge protection	Support	
Grid monitoring	Support	
Islanding protection	Support	
Temperature protection	Support	
Integrated DC switch	Support	
MECHANICAL DATA		
Dimensions (WxHxD)	1050mm x 620mm x 333mm	
Weight	89kg	
Protection class	IP66	
CERTIFICATES		
Grid Connection standard	IEC 61727	
Anti - Islanding Protection	IEC 62116	
Environmental Testing	IEC 60068 - 2	
Efficiency Measurement	IEC 61683	
Safety standard	IEC 62109 - 1/2	
Electromagnetic compatibility	IEC 61000 - 6 - 2/4	
WARRANTY	7 Years	

Note :
Specifications are subject to change without advance notice.

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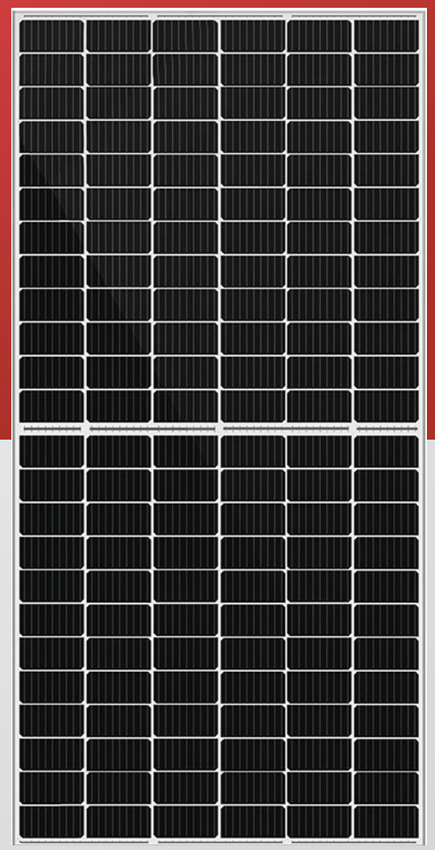
SOLAR PV MODULE (DCR/NON-DCR) 144 HALF CUT MONO PERC CELL

RANGE - PIL 525W TO 560W

High Performance Guarantee!

25 years performance warranty

10 years product warranty



Leading Features

- Ideal For Large Scale Installations
- High Power
- Better Shading Tolerance
- Lower Lcoe & System Cost
- Excellent Temperature Performance
- Non-destructive Cutting

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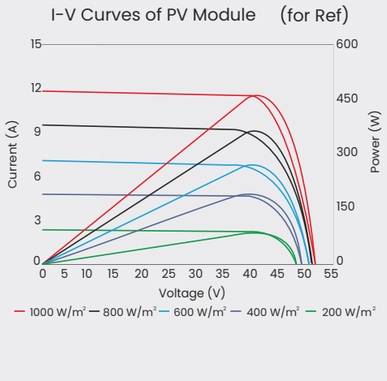
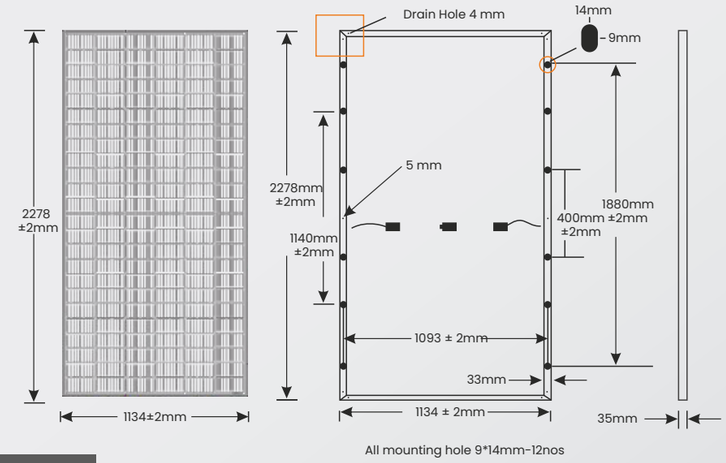
Solar PV Module 144 Half Cut Mono Perc Cell

Mechanical Dimensions





All mounting hole 9*14mm-12nos

Electrical Data

Module Type	PIL525M10HC144		PIL530M10HC144		PIL535M10HC144		PIL540M10HC144		PIL545M10HC144		PIL550M10HC144		PIL555M10HC144		PIL560M10HC144	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Watts (Pmax)	525	390.46	530	393.99	535	397.67	540	401.28	545	405.17	550	408.80	555	412.53	560	416.29
Maximum Power Voltage (Vmp)	41.54	39.00	41.76	39.20	41.99	39.42	42.21	39.63	42.46	39.86	42.68	40.07	42.91	40.28	43.14	40.50
Maximum Power Current (Imp)	12.64	10.01	12.69	10.05	12.74	10.09	12.79	10.13	12.84	10.16	12.88	10.20	12.93	10.24	12.98	10.28
Open-circuit voltage (Voc)	49.80	45.77	49.94	45.92	50.0	46.06	50.16	46.20	50.3	46.35	50.49	46.51	50.62	46.66	50.75	46.81
Short-circuit current (Isc) (A)	13.45	10.74	13.5	10.77	13.56	10.81	13.60	10.84	13.65	10.88	13.69	10.91	13.74	10.94	13.78	10.98
Module Efficiency STC (%)	20.32		20.51		20.71		20.90		21.09		21.29		21.48		21.67	
Operating Temperature (°C)	-40°C ~ +85°C															
Maximum System Voltage	1500 V DC (IEC)															
Maximum series fuse rating	20A															

STC — Irradiance 1000 W/m2 — Cell Temperature 25°C — AM = 1.5

NOCT — Irradiance 800 W/m2 — Ambient Temperature 20°C — AM = 1.5 — Wind Speed = 1 m/s

Mechanical Data

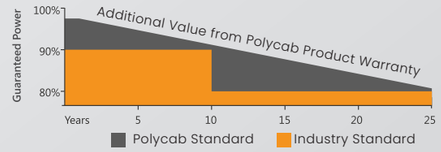
Specification	Data
Cell Type	Half cut Mono PERC
Cell Arrangement	72 Mono PERC - 144 Half Cells
Dimensions	2278x1134x35 mm
Weight	29 Kg.
Front Cover	3.2 mm ARC Glass
Frame Material	Anodized Aluminium Alloy
Junction Box	IP68 Split JB
Cable	4 mm² (IEC) - Length 0.35 mtr (Potrait)/ 1.4mtr(Landscape)
Connectors	MC4 Compatible
By-Pass Diodes	3 Pcs

Temperature Characteristic

Specification	Data
Temperature Co-efficient (Pmax)	-0.36% /°C
Temperature Co-efficient (Voc)	-0.36% /°C
Temperature Co-efficient (Isc)	+0.06% /°C
Nominal Operating Cell Temperature	42 ± 2°C

Performance Warranty

10 Years Product Warranty - 25 Years Linear Power Warranty



Increased Shade Tolerance

HALF-CELL MODULE

Functions like two parallel modules, enabling the half-cell string to work in partial shading

* The above data is liable to change without prior notice
Warranty applicable as per standard warranty terms

Note : The specification and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement, Polycab India Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice.

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POLYCAB SOLAR H1Z2Z2-K BS EN 50618

Photovoltaic Solar DC Cable, Halogen Free, Flame Retardant

Salient Features

- Halogen free
- Electron Beam Cross-linked
- Flame retardant
- Long life
- Flexibility
- UV, Ozone resistant
- Hydrolysis resistant
- High temperature resistant

Voltage Rating

Nominal Voltage:1500 V DC between conductors as well as conductor and earth.
Max permitted voltage: 1800 V

Operation Temperature

Fixed: -40˚C to +120˚C
Maximum operating conductor temperature: +120˚C

Construction

- Conductor: Tinned copper conductor as per IEC 60228, class 5.
- Insulation: E-Beam cross linked halogen free and flame-retardant compound (XLPO)
- Sheath: E-Beam cross linked halogen free and flame-retardant compound (XLPO)

Identification

Insulation : (-ve) Black & (+ve) Red
Sheath : (-ve) Black & (+ve) Black (70%)with red Strip (30%)

Bending Radius

For fixed installation - > 4D
For occasional movement - > 5D

Standard and References

EN/IEC 60228
EN 50618
IEC 60332-1-2

Test Voltage

6.5kV AC 50Hz

Compliance

Fire Performance	EN 60332-1
Smoke Emission	IEC 61034/ EN 50268-2
Halogen free material	EN 50267-2-1 / IEC 60754-2
Resistance to ozone	EN 50396
Weathering / UV	HD 605/A1 or DIN 53667
Life Expectancy	IEC 60216
Water Resistance -Category {(AD7/AD8)}	IEC 60364-5- 51

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DIMENSIONAL CHARACTERISTICS

Single Core Cross sectional Area	Nominal insulation thickness	Nominal Sheath thickness	Approx. Overall Diameter	Max. DC Resistance at 20˚ C
mm2	mm	mm	mm	Ω/km
1.5	0.7	0.8	5.0	13.7
2.5	0.7	0.8	5.5	8.21
4.0	0.7	0.8	6.0	5.09
6.0	0.7	0.8	6.5	3.39
10	0.7	0.8	7.5	1.95
16	0.7	0.9	8.5	1.24
25	0.9	1.0	10.5	0.795
35	0.9	1.1	12.0	0.565
50	1.0	1.1	14.0	0.393
70	1.1	1.2	16.0	0.277
95	1.1	1.3	18.0	0.210
120	1.2	1.3	19.5	0.164
150	1.4	1.4	21.5	0.132
185	1.6	1.6	24.5	0.108
240	1.7	1.7	27.0	0.0817
300	1.8	1.8	30.0	0.0654

CURRENT RATINGS

Nominal Cross sectional Area	Current Carrying Capacity according to method of installation		
	Single Cable Free in air	Single Cable on a surface	Two loaded cables touching, on a surface
mm2	A	A	A
1.5	30	29	24
2.5	41	39	33
4	55	52	44
6	70	67	57
10	98	93	79
16	132	125	107
25	176	167	142
35	218	207	176
50	276	262	221
70	347	330	278
95	416	395	333
120	488	464	390
150	566	538	453
185	644	612	515
240	775	736	620
300	895	850	713

*Current Ratings are based on EN 50618 at Max. Conductor Temperature 120°C and Ambient Air temperature 60°C.

Note: the expected period of use at maximum conductor temperature at 120° C is limited to 20,000 hours

Current rating / de-rating factors other than 60°C ambient temperature.

Up to 60°C	70°C	80°C	90°C
1.00	0.92	0.84	0.75

Note: These cables can be provided with twisted formation, If required.